



National Transportation Safety Board Aviation Accident Final Report

Location:	Fishers, IN	Accident Number:	CHI04LA052
Date & Time:	01/02/2004, 1420 EST	Registration:	N21992
Aircraft:	Piper PA-32RT-300	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane sustained substantial damage on impact with trees during a circling instrument approach. The pilot stated, "Descended to 1340 msl [mean sea level] and continued to 20 DME but did not clear clouds. Descended to 1100 msl and broke through at south end of runway. Remained clear of clouds and entered left, downwind circling approach to rwy [runway] 15 and proceeded with circling north entry. Clipped uppermost small branches of a tree with left wing in the middle of the turn, pulled aircraft higher for clearance and continued approx 1/4 to 1/2 mile to land on rwy 15 without further incident." Weather was: Wind 190 degrees at 12 knots, gusting to 17 knots; 3 statute miles visibility; present weather mist; sky condition overcast 300 feet above ground level; altimeter 29.87 inches of mercury. Remarks rain began at 1416 and rain ended at 1428. According to the published instrument approach procedure the circling minimum descent altitude was 1,340 feet msl and its weather minima was 1 statute mile visibility.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot not maintaining altitude/clearance from the trees during the circling approach, his continued descent below minimum descent altitude, and the pilot not performing a missed approach. A factor was the trees the pilot impacted during the circling approach.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH

Findings

1. (F) OBJECT - TREE(S)
2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (C) MINIMUM DESCENT ALTITUDE - CONTINUED BELOW - PILOT IN COMMAND
4. (C) MISSED APPROACH - NOT PERFORMED - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On January 2, 2004, about 1420 eastern standard time, a Piper PA-32RT-300, N21992, piloted by an instrument-rated private pilot, sustained substantial damage on impact with trees during a circling instrument approach to runway 15 at the Indianapolis Metropolitan Airport (UMP), near Fishers, Indiana. The personal flight was operating under 14 CFR Part 91. Instrument meteorological conditions (IMC) prevailed at the time of the accident. An Instrument Flight Rules (IFR) flight plan was on file and was activated. The pilot and his three passengers reported no injuries. The flight originated from the Huntsville International Airport-Carl T Jones Field (HSV), near Huntsville, Alabama, about 1210 and landed at UMP, its destination.

The pilot stated:

N21992 Received standard flight briefing and filed an IFR flight plan with Anniston, AL FSS [Flight Service Station], on Friday morning, 1-2-04. UMP was projected to have 700 feet msl [mean sea level] ceilings by our arrival time at 1300 hours CST. Departed HSV at approximately 1110 hours CST, enroute direct SHB [Shelbyville] VOR, direct UMP. ... Weather at IND [Indianapolis International Airport] was visibility 1 [statute mile], [overcast] at 300 msl with winds 180 at 12 [knots]. ATC advised N21992 that 2 aircraft had tried to land at UMP earlier that morning, but both had shot missed approaches. Pilot told Indy approach control that he still wanted to try the approach and permission was granted. Crossed SHB VOR at 3000 msl, picked up the 330 radial and descended to 2400 msl to begin the approach. Tracked radial to 15 DME [distance measuring equipment] and began descent at APPIE [intersection]. Descended to 1340 msl and continued to 20 DME but did not clear clouds. Descended to 1100 msl and broke through at south end of runway. Remained clear of clouds and entered left, downwind circling approach to rwy [runway] 15 and proceeded with circling north entry. Clipped uppermost small branches of a tree with left wing in the middle of the turn, pulled aircraft higher for clearance and continued approx 1/4 to 1/2 mile to land on rwy 15 without further incident. Flight was 2:09 minutes long.

The Federal Aviation Administration (FAA) interviewed a witness. The FAA's record of interview with that witness stated:

The aircraft was at full power as it was [making] more noise than normal aircraft on landing. The wings were rocking back [and] forth (Top-Gun). Looked like it was going to hit the chimney of the house across the street.

DAMAGE TO AIRCRAFT

The pilot reported that the damage to the airplane was multiple light dents on the left wing, from main gear to wing tip. He said that a substantial dent was present in the left wing approximately 24 inches inboard from the wing tip. The frontal area of fiberglass wing tip was damaged and the strobe light/positioning light was broken. A slight dent was noticed on the left aileron.

Pictures revealed a semicircular dent in the leading edge of the left wing. The dented area appeared to be crushed rearward about four inches.

PERSONNEL INFORMATION

The pilot held a private pilot certificate with ratings for airplane single engine land and instrument airplane operations. The pilot reported that his last medical examination was conducted on August 14, 2002, and that he was issued a third-class medical certificate with a limitation for corrective lenses.

According to the pilot's report, he had accumulated a total flight time of 1,320 hours and his last flight review was completed on July 9, 2002. The pilot reported a total of 158 hours in actual IMC and 45 hours as simulated IMC. The pilot's last recorded instrument proficiency check was completed on July 9, 2002.

AIRCRAFT INFORMATION

N21992 was a 1978, Piper PA-32RT-300, Lance, serial number 32R-7885265. The Lance was a low-wing monoplane of all metal construction and was equipped with a constant-speed propeller, wing flaps, and retractable landing gear. Its engine was a 300 horsepower Lycoming IO-540-K1G5D, serial number L-18528-48A. The Lance can accommodate a pilot and up to five passengers. The pilot reported that the airframe and engine had accumulated 2,475 hours total time and that the last annual inspection of the airplane was on September 25, 2003. The airplane had accumulated 23 hours since that inspection.

METEOROLOGICAL INFORMATION

Forecasted weather at the time of the accident was IMC. An IFR weather briefing and flight plan was filed with Anniston FSS.

The aviation area forecast at 1050 was as follows for Indiana:

The northern half of the state was forecast to be overcast at 1,000 feet mean sea level (msl) with cloud tops at 6,000 feet msl. Visibility is 3-5 statute miles with mist. Outlook is reported as marginal visual flight rules (MVFR).

The southern half of Indiana was forecast to be overcast at 1,000 feet msl layered up to 25,000 feet msl. After 1500 it will become overcast at 4,000 feet above ground level (agl), topping out at 6,000 feet agl.

At 1433, the Eagle Creek Airport, near Indianapolis, Indiana, located 13 nautical miles and 241 degrees from UMP, recorded weather was: Wind 190 degrees at 12 knots, gusting to 17 knots; 3 statute miles visibility; present weather mist; sky condition overcast 300 feet agl; altimeter 29.87 inches of mercury. Remarks: Rain began at 1416 and rain ended at 1428.

AIDS TO NAVIGATION

According to the published instrument approach procedure for the VOR runway 33 approach at UMP, the final approach course was 330 degrees, the category A circling minimum descent altitude was 1,340 feet msl, and its weather minima was 1 statute mile visibility. APPIE intersection is listed as that approach's final approach fix. The missed approach point is listed as 5.5 nautical miles from the final approach fix.

AIRPORT INFORMATION

The East Central US Airport/Facility Directory (A/FD) indicated UMP's field elevation was 811 feet. The A/FD listed one runway, 15/33. That runway was asphalt-surfaced, 3,850 feet long, and 100 feet wide. A precision approach path indicator services both ends of that runway.

ADDITIONAL INFORMATION

The FAA was a party to the investigation.

Pilot Information

Certificate:	Private	Age:	55, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/14/2002
Occupational Pilot:		Last Flight Review or Equivalent:	07/07/2002
Flight Time:	1320 hours (Total, all aircraft), 863 hours (Total, this make and model), 1261 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N21992
Model/Series:	PA-32RT-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	32R-7885265
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	09/25/2003, Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	23 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2475 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO 540 KIG5D
Registered Owner:	Gary P. Jones	Rated Power:	300 hp
Operator:	Gary P. Jones	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	EYE, 811 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	1433 CST	Direction from Accident Site:	241 °
Lowest Cloud Condition:		Visibility	1 Miles
Lowest Ceiling:	Overcast / 300 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	190 °	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.87 inches Hg	Temperature/Dew Point:	13 °C / 13 °C
Precipitation and Obscuration:			
Departure Point:	HUNTSVILLE, AL (HSV)	Type of Flight Plan Filed:	IFR
Destination:	Fishers, IN (UMP)	Type of Clearance:	IFR
Departure Time:	1210 EST	Type of Airspace:	Class C

Airport Information

Airport:	INDIANAPOLIS METROPOLITAN (UMP)	Runway Surface Type:	Asphalt
Airport Elevation:	811 ft	Runway Surface Condition:	Wet
Runway Used:	15	IFR Approach:	Circling; VOR
Runway Length/Width:	3850 ft / 100 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	39.935278, -86.045000

Administrative Information

Investigator In Charge (IIC):	Edward F Malinowski	Report Date:	07/29/2004
Additional Participating Persons:	Peter L Klein; Federal Aviation Administration; Indianapolis, IN		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).